The Triple Loop Mystery - Unraveling a 60-Year Quest in Organization Theory

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SUMMARY

David Boje and Grace Ann Rosile's 'Conversational Storytelling Inquiry' (CSI) book attempts a solution to a 60-plus year old mystery in organization theory. The mystery is called 'Quest for the Triple Loop' It begins with the work of Kenneth Boulding, who in 1956 published his nine levels of systems. Boje and Rosile take us on a 60-year-old mystery in organization theory, the "Quest for the Triple Loop." David Boje and Grace Ann Rosile, argue that "Triple Loop" learning involves moving beyond open systems and into the realm of quantum physics. They propose a new approach to organizational development and change called "Conversational Storytelling Inquiry" (CSI), which combines three loops of learning, with "Ensemble Leadership" as a fourth layer. CSI emphasizes collective leadership, moving away from traditional hierarchical structures and incorporating indigenous perspectives to achieve socioeconomic transformation.

The Triple Loop Mystery - Unraveling a 60-Year Quest in Organization Theory

We sill summarie the main themes and key ideas from the essay "The Triple Loop Quest" by David Boje and Grace Ann Rosile, focusing on their upcoming book "Conversational Storytelling Inquiry" (CSI).

Core Mystery: The Quest for Triple Loop Learning

Our dives into a 60-year-old mystery in organizational theory: defining and identifying "Triple Loop Learning." The mystery originates with Kenneth Boulding's 1956 nine-level hierarchical systems theory. Subsequent attempts to define Triple Loop, often as a progression from Argyris and Schon's Single- and Double-Loop Learning models, failed to reach a consensus.

Key Points:

- **Boulding's Challenge:** Boulding's theory presented a hierarchical framework of systems, with each level incorporating the previous ones. He challenged management science to move beyond the limitations of "open systems" (Level 4) and explore higher levels of complexity.
- **Single-Loop Learning (Level 3 Cybernetic System):** This involves correcting errors without altering underlying values or policies. Analogy: a thermostat adjusting temperature. Focus: Doing things right.
- **Double-Loop Learning (Level 4 Open System):** This involves correcting errors by changing fundamental values and policies. Analogy: a thermostat questioning its set temperature. Focus: Doing the right things.

• **Beyond Open Systems:** Louis Pondy, Boje's mentor, attempted to answer Boulding's challenge but faced rejection from the academic community. This highlighted the difficulty of conceptualizing systems beyond the "open system."

Boje and Rosile's Solution:

Boje and Rosile propose a new interpretation of Triple Loop learning, moving beyond a purely hierarchical model and integrating insights from various disciplines, including:

- **Quantum Physics:** Boje draws parallels between the quest for a unified theory in physics and the search for Triple Loop. He suggests that quantum principles, with their emphasis on interconnectedness and complexity, offer valuable insights.
- Indigenous Knowledge Systems: Boje and Rosile incorporate indigenous perspectives, particularly the concept of "Ensemble Leadership", to emphasize collective, relational, and heterarchical approaches to leadership and organizational change.
- Socio-Economic Approach to Management (SEAM): They integrate SEAM, a scientific method utilizing Diagnosis, Project Planning, Implementation & Evaluation (D-PIE) teams to address dysfunctions and optimize human potential for improved economic performance.

Boje and Rosile's Triple Loop Framework:

- **First Loop (Cybernetic System):** Command-and-control hierarchy with top-down problem-solving.
- Second Loop (Open System): Adaptive systems focused on both deviation-control and deviation-amplifying innovation.
- Third Loop (Socio-Economic): Transformation of both command-and-control and open systems using cascading D-PIE teams to develop human potential and improve socio-economic performance.

Ensemble Leadership:

Boje and Rosile introduce "Ensemble Leadership" as an intervention to optimize the three loops. It promotes:

- Heart of Care Discourse: Networking and integrating the contributions of all three loops.
- **Collectively Co-created Leadership:** Shifting from hierarchical models to more egalitarian and distributed approaches.
- **Rhizomatic Structure:** Embracing dynamic and fluid leadership interactions within a heterarchical system.

Key Quotes:

- **Boulding (1956):** "Perhaps one of the most valuable uses of the above scheme is to prevent us from accepting as final a level of theoretical analysis which is below the level of the empirical world which we are investigating."
- Rosile, Boje & Claw (2018): "Ensemble leadership theory assumes a social structure, which is decentered as well as multi-centered and nonhuman-centric."

Conclusion:

Boje and Rosile offer a fresh perspective on the elusive Triple Loop learning concept. Their framework, integrating quantum principles, indigenous wisdom, and SEAM, suggests a move towards more interconnected, heterarchical, and human-centered approaches to organizational development and change. By advocating for "Ensemble Leadership" and a "heart of care" discourse, they propose a path towards sustainable and equitable socio-economic performance.



Boulding, Kenneth E. (1956). General systems theory—the skeleton of science. *Management science*, *2*(3), 197-208. https://www.jstor.org/stable/pdf/2627132.pdf?casa_token=Nk32AvWyKhgAAAAA:3CXNNw f80R12yvLlc8J0iCy4ArxsnLo-5v3qNqz4Yema9pT9zl0BjSK9D_rOPcv-0f5cvdlyKxCrBaWe9mWMQB1PwLrJIwHfe_alNin4kqDgEM_Fyg9jBA

Kenneth Boulding's 9 levels Hierarchical Systems Theory are cumulative, each incorporating all those below.

What happened next?

As David Michael Boje tells the history of Triple Loop, Chris Argyris and Donald Schon's' single-loop and double-loop learning systems are models that describe how organizations learn and correct errors. When David Boje was an assistant professor at UCLA from 1978 to 1986, almost every doctoral student's management or organization systems dissertation was in pursuit of Double-loop, or transforming any kind of organization from Single-loop to Double-loop.

Single-loop learning: Argyris and Schon's single-loop involves an organization adjusting correct errors without changing the underlying values or policies of the management team. For example, a thermostat is a single-loop learner because it turns the heat on or off based on the temperature of the room. Single-loop learning focuses on doing things right. Single-loop learning might observe causality, but it usually doesn't address it. Single-loop learning involves making small fixes and adjustments to resolve issues. Without referencing, Kenneth Boulding, single-loop fits the Kenneth Boulding (1956) level three system, cybernetic.

Double-loop learning: Argyris and Schon's double-loop, Involves an organization adjusting to correct errors by changing the underlying leadership values or policies of an organization. For example, a thermostat would be a double-loop learner if it questioned the temperature it should measure. The double-loop learning focuses on doing the right things. Double-loop learning involves identifying and understanding causality. Double-loop learning involves solving larger problems by identifying root causes. Double-loop learning involves and beliefs and confronting existing belief systems.

David Boje as a Ph.D. student at University of Illinois, worked with Professor Louis Ralph Pondy, who took up Boulding's challenge to Management Science, to go beyond level four, Open Systems. Louis Pondy prepared an article called 'Beyond Open Systems' and submitted it to the Academy of Management Review journal. David Boje was in Pondy's office when the letter came (back in 1978 there were letters), and tears rolled down Pondy's face. His revolutionary theory was rejected. Pondy sobbed, and Boje sobbed with him. The editor of the journal, called Pondy's article a cute theory, but not worthy of the Academy of Management. Pondy sent his rejected article to Ian Midriff, and it was published in a lowly annual journal, without much notice in Management Science.

Louis Ralph Pondy's (1976) Beyond open system models of organization. 1976 is date of rejected classic Beyond Open System (BOS) models of organization paper by Pondy. Pondy & Mitroff (1979) is the revision of BOS. 1(1), 3-39. David Michael Boje reprinted the original Pondy (1976) rejected BOS paper with an introduction, see Boje (2005) Emergence: Complexity and Organization EC:O journal, Vol. 7 (issues 3–4), 119–137.

David Boje decided to write a book about Louis Pondy, and accepting the challenge to go Beyond Open Systems. and With Rohny Saylors (2024) worth a book abut Louis Ralph Pondy's contributions to management thought.

But, how does all this history relate to Boje and Rosile's CSI book, and to their search for the 'Triple Loop'?

Spoiler alert: An Open System Level is analogous to Double-loop. The Single-loop is analogous to what Kenneth Boulding and then Louis Pondy call, 'Cybernetic system.' But, that still does not answer the question, what is the Triple Loop? So many management and organization theorists tried and failed to find the Triple-loop. OK, here's the answer: Going Beyond Open System, is precisely what Triple Loop is all about.

David Boje and Grace Ann Rosile's 2025 book, CSI. Therefore refers to single-loop learning systems, an example of 'command and control' cybernetic control systems. This is straight out David Boje apprenticeship with Louis Ralph Pondy, who in 1976 tried to publish a Beyond Open Systems article in the Academy of Management journals, but was rejected. That article was then co-authored Pondy and Ian Mitroff and sent to a journal in the b-ranking. Boje had this insight, Command and Control Cybernetic systems correct errors without changing values or policies, onlymaking small fixes and adjustments without going into root causes. Boje realized that this is analogous to Single Loop. And the Double-Loop learning is analogous to Boulding's (1956) and Pondy's (1976) open systems. David Boje and Grace Ann Rosile, in their 2025 book CSI, refer to double-loop systems, as an example of open systems. Open systems are making adaptive adjustments, and learning to solve problems by identifying root causes.

But where is the Triple Loop? Boje and Saylor's (2024) book sought the answer by reworking the Boulding (1956) model and reworking the Pondy (1976) interpretation in his Beyond Open Systems model.



Kenneth Boulding offers this challenge to Management Science "... to break loose from a sterile stimulus-response model. Finally, the above scheme might serve as a mild word of warning even to Management Science. This new discipline represents an important breakaway rom overly simple mechanical models in the theory of organization and control."

Here is a clue, where to find the solution to the Quest for Triple Loop.

For Kenneth Boulding, 2nd level systems include 1sr level., 3rd level includes some aspect of 2nd level, and so on, up to the final 9th level that includes all the other lower level systems. Kenneth Boulding puts it this way: "Perhaps one of the most valuable uses of the above scheme is to prevent us from accepting as final a level of theoretical analysis which is below the level of the empirical world which we are investigating. Because, in a sense, each level incorporates all those below it, much valuable information and insights can be obtained by applying low-level systems to high-level subject matter."

Ah hah moment, flashed in Boje. The Triple loop is not just beyond the 4th level Open System. Rather, the solution to the mystery, requires going back to Newtonian physics, and then to Einstein, to Niels Bohr and Werner Heisenberg, and the hundred year debate about what is beyond Newtonian physics. Answer, it is Quantum Physics. David Boje noticed that his mentor, Louis Pondy, was trained as a physicist, and was looking at the Kenneth Boulding model of nine hierarchical levels of systems.

Let's briefly review the Kenneth Boulding theory. Kenneth Boulding (1956) proposed nine levels. David Boje has added a metaphor identifier at the beginning of each level. For more see David Boje's 2008 book, Storytelling Organizations, which compares Boulding's model with that of Pondy 's(1978) rejected article from Academy of Management journal, that became the Pondy and Mitroff (1979) article published in the lesser known annual journal.

David Boje, realized in rereading Boulding (1956) the solution to the quest for Triple-loop was not in any one level, rather, it was some as yet unknown combination of levels. That is the key Boje is seeking. Let's read the Bouling nine levels of hierarchical system. Boje realized that there is no way that complex organizations are hierarchical, they are something else, some other answer awaits.

Kenneth Boulding's (1956) Nine Levels

(1) Frameworks System: The first level is that of the static structure. It might be called the level of framework. This is the geography and anatomy of the universe-the patterns of electrons around a nucleus, the pattern of atoms in a molecular formula, the arrangement of atoms in a crystal, the anatomy of the gene, the cell, the plant, the animal, the mapping of the earth, the solar system, the astronomical universe. OK, Boje notices that in Boulding's first level, it is aobout physcis, about electron patterns, about the biologiy of cells, plants and animals. But it's a static system, an abstract modeling, and not real living systems. Boje askes, what if quantum physics is an answer, and this is just the static non-acceptalbe answer?

(2) Clockworks System: The next level of systematic analysis is that of the simple dynamic system with predetermined, necessary motions. This might be called the level of clockworks. The solar system itself is of course the great clock of the universe from man's point of view, and the deliciously exact predictions of the astronomers are testimony to the excellence of the clock which they study. Boulding continues at the end of the article, saying" The level of the "clockwork" is the level of "classical" natural science, especially physics and astronomy, and is probably the most completely developed level in the present state of knowledge, especially if we extend the concept to include the field theory and stochastic models of modern physics. Boje notices that in level two (Clockworks) it is once again about physics, and the Einstein field theory solution to quantum physics, rather than the Neils Bohr solution, favored by Karen Barad's (2007) book, 'Meeting the Universe Halfway.'.

(3) Cybernetic System: The next level is that of the control mechanism or cybernetic system, which might be nicknamed the level of the thermostat. This differs from the simple stable equilibrium system mainly in the fact that the transmission and interpretation of information is an essential part of the system. OK, here Boje notices that the Cybernetic error-correcting system is analogous to how Argyris and Shon in the 1970s define single-loop learning systems.

(4) Open System: The fourth level is that of the "open system," or self-maintaining structure. This is the level at which life begins to differentiate itself from not-life: it might be called the level of the cell. Something like an open system exists, of course, even in physico-chemical equilibrium systems; atomic structures maintain themselves in the midst of a throughput of electrons, molecular structures maintain themselves in the midst of a throughput of atoms. Flames and rivers likewise are essentially open systems of a very simple kind. OK, here Boje notices that Boulding's 'open system' is beginning to notice living systems, but its at level of cells, and equilibrium. Boje realizes that at the end of Pondy's life, in his last presentation to Academy of Management, Pondy rejected the equilibrium model, and concluded that organizaitons are conflict systems, their natural state, even called them anarchies

Boulding adds in his 1956 article: "Beyond the fourth level it may be doubted whether we have as yet even the rudiments of theoretical systems". This is exactly the challenge that Louis Ralph Pondy took as a challenge. Boje realizes that in the quest for triple loop, predecessors often turned to Gregory Bateson's Level III learning model, which also concluded like Boulding, that higher than open system may be too risky a move, and ill-advised, possible Boje concludes because they could turn into anarchies, as Pondy noted.

(5) Cell-Society System: The fifth level might be called the genetic-societal level; it is typified by the plant, and it dominates the empirical world of the botanist. The outstanding characteristics of these systems are first, a division of labor among cells to form a cell-society with differentiated and mutually dependent parts (roots, leaves, seeds, etc.), and second, a sharp differentiation between the genotype and the phenotype, associated with the phenomenon of equifinal or "blueprinted" growth. Ok, Boje observes that Myra J. Hird, the feminist materialist, her work on the living cellular of the world, form our bodies to the soil, is about material-semiotics, what Pondy (1976) calls 'organic'. But Boje believes here is where the quest for Triple-loop gets interesting. What if triple-lopp is like Myra J. Hird says, in all life forms from the cell to the animal, plant, or human body, with its 37 trillion living cells?

(6) Animal System: As we move upward from the plant world towards the animal kingdom we gradually pass over into a new level, the "animal" level, characterized by increased mobility, teleological behavior, and self-awareness. Here we have the development of specialized information-receptors (eyes, ears, etc.) leading to an enormous increase in the intake of information; we have also a great development of nervous systems, leading ultimately to the brain, as an organizer of the information intake into a knowledge structure

or "image". Increasingly as we ascend the scale of animal life, behavior is response not to a specific stimulus but to an "image" or knowledge structure or view of the environment as a whole. This image is of course determined ultimately by information received into the organism; the relation between the receipt of information and the building up of an image however is exceedingly complex. Ok, in the 6ths Boulding level (Animal systems), Boje observes humans are storytelling animals, but animals also have five senses and tell stories in their own language. Boje is taking an indigenous turn, along with his wife Grace Ann Rosile, who wrote her book, Tribal Wisdom. Boje notes that Pondy picked up on 'image' as the level 6 metaphor but rendered it a humancentric approach. Again, Boje reflects on quantum physics, on his books with Tonya Henderson, and how the application of Karey Barad, Donna Haraway, and Myra J. Hird is all about going beyond the humancentric to the posthuman materialist turn.

(7) Human System: The next level is the "human" level, that is of the individual human being considered as a system. In addition to all, or nearly all, of the characteristics of animal systems man possesses self-consciousness, which is something different from mere awareness. His image, besides being much more complex than that even of the higher animals, has a self-reflexive quality-he not only knows, but knows that he knows. This property is probably bound up with the phenomenon of language and symbolism. It is the capacity for speech-the ability to produce, absorb, and interpret symbols, as opposed to mere signs like the warning cry of an animal-which most clearly marks man off from his humbler brethren. Boje observes that Pondy (1976) interprets this as 'symbol' and the basis for founding the symbolism movement in management and organization studies. Boje notes the problem is that its human centric, where for Boulding (1956) humans are one among many animals, with their own language and symbolis.

(8) Social Organizations System: Because of the vital importance for the individual man of symbolic images and behavior based on them it is not easy to separate clearly the level of the individual human organism from the next level, that of social organizations. In spite of the occasional stories of feral children raised by animals, man isolated from his fellows is practically unknown. So essential is the symbolic image in human behavior that one suspects that a truly isolated man would not be "human" in the usually accepted sense, though he would be potentially human. Nevertheless, it is convenient for some purposes to distinguish the individual human as a system from the social systems which surround him, and in this sense social organizations may be said to constitute another level of organization. Boje observes that Pondy (1976) reduces Boulding's (1956) social organizing to just roles, and again that makes it humancentric, and ignores many posthuman systems, and the Karen Barad (2007) quantum posthuman approach of intra-active material-discursive across life forms.

(9) Transcendental Systems: To complete the structure of systems we should add a final turret for transcendental systems, even if we may be accused at this point of having built Babel to the clouds. There are however the ultimates and absolutes and the inescapable

unknowables, and they also exhibit systematic structure and relationship. It will be a sad day for man when nobody is allowed to ask questions that do not have any answers. Boje observes that Pondy (1976) lables Boulding (1956) transcendental as just a question mark (?). For Boje the transcendental involves the spiritual in indigenous ways of knowing where cells, plants, animals, rivers, moutains are waves of spirit (see Grag Cajete, 2000, Native Science) and the quantum storytelling videos of Leroy Little Bear.

David Boje (2008) book compares Kenneth Boulding's nine levels, to Pondy's (1978) nine levels and to the dialogical theory of Mikhail Bakhtin. This was Boje' 2008 answer to the quest for Beyond Open Systems, but now Boje and Rosile CSI (2025) propsose a much different answer.



Boje and Rosile's CSI book offers three approaches for Organizational Development and Change (ODC), and a 4th for 'Ensemble Leadership Development'. Boje and Rosile use a combination of 3 ODC loops, and if asked, add 'Heart of Care Ensemble Leadership'.



First Loop - Cybernetic System ODC of command-and-control hierarchy (deviationcontrolling) with top-down CSI-ODC problem solving, but less opportunity for human potential initiative.

Second Loop - Open System ODC adapting by deviation-control (1st Loop) and deviationamplifying (2nd Loop) innovation projects, but less opportunity to bring about scalability CSI- ODC for socio-economic performance.

Louis Ralph Pondy, is one of the leading experts in 'Open Systems' and systems that are beyond it.



THE MANAGEMENT THOUGHT OF LOUIS R. PONDY

RECLAIMING THE ENTHINKMENT PATH

David M. Boje



Boje, D. M. and Saylors, R. (2024). *The Management Thought of Louis R. Pondy: Reclaiming the Enthinkment Path.* Taylor & Francis.

Pondy, L. R. and Mitroff, I. I. (1979). "Beyond open system models of organization," in B. Staw (ed.), Research in organizational behavior, Vol. 1 .

Pondy and Mitroff (1979) apply Kenneth Boulding's 9 levels of systems theory: 1.Framework, 2. Mechanistic, 3. Control (cybernetic deviation-counteraction, e.g. command and control), 4. Open systems (both deviation-counteracting & deviationamplifying), 5. Organic, 6. Image systems, 7. Symbol systems, 8. Roles systems, 9 Transcendental systems.

The Organic, Image, Symbol, Roles, and Transcendental are beyond Level 4 Open Systems, and Level 3 Control Systems. We do not suggest that these are the meaning of triple-loop

systems.

Pondy and Mitroff defined an ;open system; as an organization that interacts with its social, economic-, political- and other organizations-environment by exchanging resources. Open systems 'suck orderliness from its environment, but can exhibit nor more variety than the variety in its environment (Law of Limited Variety). Open systems adapt their people skills, technology, and structure to survive.

What are the systems beyond open systems? We suggest they are complex systems with multiple centers.

Third Loop - Socio-Economic ODC is transformation of both command and control (single loop) and open systems (our rendition of double-loop), and a third-loop of Henri Savall's socioeconomic (S-E) approach to ODC by improving and developing human potential and S-E development by implementing cascading D-PIE teams (Diagnosis, Project planning, Implementation, & Evaluation) vertically and horizontally. The Goal of Triple Loop is to change the spiral direction from downward to upward economic performance of the enterprise (see Rosile, Boje & Claw, 2018).



What a downward socioeconomic spiral of poor performance looks like.



There are four steps in developing D-PIE teams to transform downward spiral of economic performance into upward spiral of increasing economic results.



CSI Socioeconomics of Organizational Development and Change (ODC)

Heart of Care - Ensemble Leadership ODC optimizes three loops into win-win Together-Telling & Together-Listening, Co-leadership implemented within and between organizations for optimal 3C's (cooperative-coordination-consultation).

Socioeconomics of ODC. David Boje and Grace Ann Rosile have a 20+ year project developing 'Business Storytelling of Socioeconomics.' between CSI and SEAM (Socio-Economic Approach to Management) of ODC. The 2024 World Scientific Encyclopedia of Business Storytelling is edited by David Boje. Volume 5 is edited by Amandine Savall. CSI interventions is compatible with Socio-Economic (SE) approach to ODC. The process of cascading multiple 'CSI-SE' focus groups throughout a business (university, government agency, non-profit enterprise, etc.) is an intervention for ODC. D-PIE is a spiral that expands, rather than a repeating same old thing again and again. The D-PIE ODC expands in three dimensions: Time, Breadth & Potential, and Chang to Game Roles of the organizations.



This is the path to Upward Spiral Socioeconomic Performance:

D-PIE teams are initiated within and between functional departments, divisions, and between levels of hierarchy, creates groundwork for S-E 3C's (cooperative-coordinationconsultation) together-listening and together-telling co-inquiry D-PIE (diagnosis for project planning, implementation, & evaluation). The result is cascading many D-PIE teams throughout a complex organization for purpose of ODC and continuing innovation. At the Transorganization Development, scale, CSI cascading D-PIE teams interface 3C's between a client organization and suppliers, customer focus groups, between sets of organizations pursuing S-E sector innovation in a particular technology and/or environmental sustainability initiative.

Organizational and Transorganizational Development has three levels of steering (H. Savall, Zardet, Bonnet, & A. Savall, 2024: 20): "simulation, orchestration (or synchronization), and cleaning-up what is deteriorating over time." CSI's use of Abduction-Induction-Deduction (AID) tool within and across D-PIE teams of a cascading ODC transformations. Henri Savall's socioeconomic approach is a scientific method, utilizing D-PIES to resolve dysfunctions and use untapped human potential to turn hidden costs into positive economic performance.



The result is an organizational command-and-control (single loop) culture of cybernetic (deviation-correction) into an open system of both deviation-correction and innovative deviation-amplification (the double loop. Then, there is scalability to Socio-Economic (SE) ODC called Triple Loop. But notice the D-PIE teams are separate, not coordinating, not networking.



Finally, instead of the three loops becoming win-lose with one another, a Heart of Care supports what's the best contribution of each loop, with an intervention, we call "Ensemble Leadership." This is where the Cascading D-PIE teams are networking together, and the three loops of ODC are optimizing by networking together, in acts of self-organizing by the 3C's.



Rosile, G. A., M Boje, D., & Claw, C. M. (2018). Ensemble leadership theory: Collectivist, relational, and heterarchical roots from indigenous contexts. *Leadership*, 14(3), 307-328.Click here to download a PDF.



CSI Horsesense-Assertiveness is used to Implement Ensemble Leadership to optimize win-win within and betwee 1st, 2nd, and 3rd ODC initiatives.



We will provide a brief review of the Triple Loop literature in ODC, then show how our approach 'Ensemble Leadership Theory) resolves several shortcomings.

The term 'Triple Loop' is often said to go beyond Argyris and Schön's (1974) and be equivalent to Deutero-Learning (1978, 1996), however, as Tosey et al. (2012) argue, this is not how Argyris and Schön see it. For them Deutero-Learning is akin to Double Loop.

"Whilst 'triple-loop learning' has been inspired by Argyris and Schön, we establish that the term does not arise in their published work" (Tosey, Visser, & Saunders, 2012: 291).

Tosey et al. (2012) review finds little consensus among how a number of authors have conceived of a further type of organizational learning, for which the most prominent term is 'triple-loop' learning (Flood and Romm, 1996; Isaacs, 1993; Romme and Van Witteloostuijn, 1999; Snell and Chak, 1998; Swieringa and Wierdsma, 1992; Yuthas et al., 2004). For example, according to Tosey et al. (2012), Roper and Pettit (2002) observe that the discussion of triple-loop learning is often normative, simply encouraging organizations to aspire beyond single- and double-loop learning.

Some attempt to equate Bateson's (1973) Learning III framework as grasping the elusive Triple-Loop. But the problem is Bateson's Level III challenges the assumption that higher orders of learning are desirably because that level entails risks for transformational learning in organizations.

Triple-loop learning equated with Bateson's Learning III has been applied to climate change (BUpta, 2016).:

"Triple-loop learning is required when problems are super wicked and unstructured and the deep underlying causes and context have to be taken into account in redefining, relearning, and unlearning what we have all learnt before" (Gupta, 2016: 193).

Another example of Bateson's Level III (equated to elusive Triple-llop) is Fahrenbach and Kragulj (2022). Their focus is on personality changes of leaders, in a "profound redefinition of the self" (Bateson, 1972, pp. 300-303), as cited in Fahrenbach and Kragulj, IBID.).

"Interventions that change how organizations respond to events and that change the routines within an organization may be suitable to facilitate triple-loop learning in terms of changing organizational identity over time" (Fahrenbach & Kragulj, 2022: 597).

Triple-loop learning is often described as a change of the "underlying purposes, principles or paradigms" (Tosey et al., 2012, p. 294) of an organization, which lacks sufficient theoretical roots and empirical support" (Fahrenbach & Kragulj, 2022: 598).

How does CSI approach Triple-Loop.

1. We do not assume that it is fulfillment of Argyris and Schön approach to Single and Double loop, nor it is Deutero-Learning (which as reviewed is about the same as Double-loop.

2. We do not equate CSI-Triple Loop with Gregory Bateson's Learning III.

3. Rather, our approach invokes Rosile, Boje, & Claw's (2018) Ensemble Leadership.

"We see ensemble leadership theory as starting from a different origin: the indigenous world-view. It provides an emphasis in the leadership context, which is largely missing in traditional leadership literature. First, the ensemble leadership theory casts leadership as a collective phenomenon, and privileges the collective rather than the individual. This moves away from the "hero" leadership views and instead, connects with the recent "relationality" and "shared" views of leadership, breaking new ground in collective leadership" ... "ensemble leadership theory assumes a social structure, which is decentered as well as multi-centered and nonhuman-centric. Fourth, the combination of dynamism and multi-centeredness yields a structure which storytelling scholars call "rhizomatic" and archeologists term "heterarchical" (Rosile, Boje, & Claw, 2018: 307).

The anthropological term 'heterarchy' in Ensemble Leadership Theory (ELT) includes (1) collectively co-created, (2) dynamic and fluid, (3) more egalitarian than dispersed (within the person), distributed (shared among persons), or relational (co-created in the relationships) approaches to leadership.

Ensemble Leadership Theory (ELT) is not the repeating (cybernetic-control system doing error-correction) patterns of dispersed leadership, not the linear beginning-middle-end narrative emplotment(or cause-effect) of distributed leadership, nor the cyclical or spiral of change of the relational leadership framework.

Rather, Ensemble Leadership Theory (ELT) focus is between moving form downward to upward spiral economic performance, and navigating rhizomatic. Ensemble leadership means every follower is a potential leader.

ELT acknowledges not one hierarchy but many hierarchies, in a decentered system of heterarchies. Boje and Rosile's CSI uses a 'heart of care' discourse as a way of networking together single-loop (command and control), double-loop (open systems, which is akin to Argyris & Schön double-loop). However, for triple-loop we focus on a socioeconomic approach to management (Savall & Zardet, 2008; Savall, Péron, & Zardet, 2015).

We develop the socioeconomic approach to ODC, then follow up with our approach to ELT.

We (Rosile et al., 2021) have done field work to validate ELT on supply chains of some of the top US corporations. The Coalition of Immokalee Workers (CIW) successfully combated modern-day slavery by transforming the ways that over a dozen major brands, including Taco Bell, Subway, and Wal-Mart, manage their supply chains with greater corporate social responsibility.

"The CIW history demonstrates that traditional bureaucratic hierarchical systems may be less effective than flatter, more diverse "heterarchical" systems. We term those dynamic heterarchical systems "Ensemble" (Rosile et al., 2018)" (Rosile et al., 2021: 378). This is the list of corporations doing this approach.

Yum! Brands (Taco Bell, Pizza Hut, KFC) McDonald Burger King Whole Foods Market Subway Bon Appétit Management Co. Compass Group Aramark Sodexo Trader Joe's Chipotle Mexican Grill Wal-Mart The Fresh Market USA Hold (Giant, Stop & Shop) Ben & Jerry's "This ensemble approach employs storytelling processes, and it allows the CIW to animate a cross-field range of actors into a collective movement resulting in largescale change" (Rosile et al., 2021: 377).

In sum, ELT is not at all the same is prior attempts to theorize Triple-Loop, nor is it Bateson's Learning III. Rather we develop an indigenous approach to ELT. We deploy socioeconomic as an ODC approach, with cascading D-PIE teams. Rather than moving the entire organizationn from Single-loop to Douple-Loop, to Triple Loop and on to Ensemble, we have an approach that is multi-centered, respecting the three loops of leadership, then networking them together for coordination, communication and cooperation with ELT.

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